Amendments of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-32. (cancelled)

- 33. (previously presented) A method of communicating data of a known data type from a first process to a second process on a single processing system, the method comprising:
- defining a relationship between a second queue that is associated with the second process and at least one of the known data type and a first queue that is associated with the first process;
- receiving the data in the first format from the 10 first process;
 - converting the data from the first format to a standard format:
- determining the second queue based upon the defined relationship after receiving the data in the first format from the first process;
 - $\mbox{routing the data in the standard format to the second queue;} \label{eq:condition}$
 - receiving the data routed in the standard format at the second queue; and
- 20 routing the data in the second format to the second process.
 - 34. (previously presented) A method of communicating data from a source process to a destination process, the method comprising:
- receiving the data in a source format from the 5 source process;

converting the data from the source format to a first format;

 $\qquad \qquad \text{converting said data from the first format to a} \\ \text{destination format;} \\$

transmitting the data in the destination format to the destination process;

generating an acknowledgment of receipt of the
data when the data is received at the destination process; and
notifying a user of an error upon an occurrence

of at least one of a specified number of other transmission
attempts and an absence of the acknowledgment of receipt

- within a given time period.

 35. (previously presented) The method of claim
- 34, wherein the communication data is of a known data type.
 36. (previously presented) The method of claim

34, further comprising:

- determining a destination address based upon a source address associated with the source process after 5 receiving the data in the source format from the source process.
- 37. (currently amended) A machine computer readable medium encoded with machine computer readable instructions for performing a method of communicating data of a known data type from a source process to a destination process, said method comprising:

receiving said data in a source format from said source process;

converting said data from said source format to a first format:

determining a destination address that is associated with said destination process based upon at least one of said known data type and a source address that is associated with said source process;

converting said data in said first format to a 15 destination format:

transmitting said data in said destination format to said destination process;

prior to said receiving of said data in said source format, defining at least one of said known data type, said source address, said source format, said first format, said destination format, and a relationship between said destination address and said at least one of said known data type and said source address, wherein said relationship is defined by accepting user input that defines said relationship

25 between said destination address and said at least one of said known data type and said source address;

said determining using said relationship in determining said destination address; and said relationship relating said destination

30 address to both said known data type and said source address.

38. (currently amended) The machine computer readable medium of claim 37, said method further comprising: transmitting said data in said first format with said destination address;

receiving said data transmitted in said first format at said destination address;

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generating an acknowledgment of receipt of said data when said data transmitted in said destination format is received at said destination process; and

notifying a user of an error upon an occurrence of at least one of a specified number of other transmission attempts and an absence of said acknowledgment of receipt within a given time period.

39. (currently amended) The <u>machine computer</u> readable medium of claim 37, wherein each of said source format, said first format, and said destination format are different.

40. (currently amended) The machine computer readable medium of claim 37, wherein:

said source format and said destination format are identical; and

said source format and said destination format are different from said first format.

- 41. (currently amended) The <u>machine computer</u> readable medium of claim 37, wherein said defining comprises accepting user input that defines said source address of said source process.
- 42. (currently amended) The machine computer readable medium of claim 37, wherein said defining comprises accepting user input that defines said source format of said data.
- 43. (currently amended) The machine computer readable medium of claim 37, wherein said defining comprises accepting user input that defines said destination format of said data.
- 44. (currently amended) The machine computer readable medium of claim 37, wherein said converting of said data from said first format to said destination format comprises selecting said destination format from a plurality of available destination formats based upon said known data type of said data.
- 45. (currently amended) The machine computer readable medium of claim 37, wherein said converting of said data from said first format to said destination format comprises selecting said destination format from a plurality of available destination formats based upon said destination address transmitted with said data in said first format.

46. (currently amended) A machine <u>computer</u> readable medium encoded with <u>machine computer</u> readable instructions for performing a method of communicating data of a known data type from a source process to a destination process, said method 5 comprising:

receiving said data in a source format from said source process;

converting said data from said source format to a first format;

determining a destination address that is associated with said destination process based upon at least one of said known data type and a source address that is associated with said source process;

transmitting said data in said first format 15 with said destination address;

receiving said data transmitted in said first format at said destination address;

converting said data in said first format to a destination format;

20 transmitting said data in said destination format to said destination process;

prior to said receiving of said data in said source format, defining at least one of said known data type, said source address, said source format, said first format,

25 said destination format, and a relationship between said destination address and said at least one of said known data type and said source address, wherein said relationship is defined by accepting user input that defines said relationship between said destination address and said at least one of said

30 known data type and said source address;

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said determining using said relationship in determining said destination address; and

said relationship relating said destination address to said source address without relating said 35 destination address to said known data type.

47. (currently amended) A machine computer readable medium encoded with machine computer readable instructions for performing a method of communicating data of a known data type from a source process to a destination process, said method comprising:

receiving said data in a source format from said source process;

converting said data from said source format to a first format;

determining a destination address that is associated with said destination process based upon at least one of said known data type and a source address that is associated with said source process;

transmitting said data in said first format 15 with said destination address;

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 $\mbox{receiving said data transmitted in said first} \\ \mbox{format at said destination address;} \\$

converting said data in said first format to a destination format;

20 transmitting said data in said destination format to said destination process;

prior to said receiving of said data in said source format, defining at least one of said known data type, said source address, said source format, said first format,

said destination format, and a relationship between said destination address and said at least one of said known data type and said source address, wherein said relationship is defined by accepting user input that defines said relationship between said destination address and said at least one of said known data type and said source address;

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said determining using said relationship in determining said destination address; and said relationship relating said destination address to said known data type without relating said

address to said known data type without relating said 35 destination address to said source address.

48. (previously presented) A system for communicating data of a known data type from a source process to a destination process, the system comprising:

means for receiving said data in a source 5 format from said source process;

means for converting said data from said source format to a first format:

means for determining a destination address
that is associated with said destination process based upon at
10 least one of said known data type and a source address that is
associated with said source process;

 $\mbox{means for transmitting said data in said first} \\ \mbox{format with said destination address;} \\$

means for receiving said data transmitted in

15 said first format at said destination address; means for converting said data in said first format to a destination format;

means for transmitting said data in said destination format to said destination process;

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means for generating an acknowledgment of receipt of said data when said data transmitted by said destination transmitter is received at said destination process; and

means for notifying a user of an error upon an 25 occurrence of at least one of a specified number of other transmission attempts and an absence of said acknowledgment of receipt within a given time period.

- 49. (previously presented) The system of claim 48, wherein each of said source format, said first format, and said destination format are different.
- $\,$ 50. (previously presented) $\,$ The system of claim 48, wherein:
- $$\operatorname{said}$$ source format and said destination format are identical; and
- 5 said source format and said destination format are different from said first format.
- 51. (previously presented) The system of claim 48, further comprising means for defining at least one of said known data type, said source address, said first format, said destination format, and a relationship between said destination address and said at least one of said known data type and said source address prior to said data in said source format being received by said source receiver.
 - 52. (previously presented) The system of claim 51, wherein said means for defining at least one of known data type accepts user input that defines said known data type of said data.
 - 53. (previously presented) The system of claim 51, wherein said means for defining at least one of known data type accepts user input that defines said source address of said source process.
 - 54. (previously presented) The system of claim 51, wherein said means for defining at least one of known data type accepts user input that defines said source format of said data.
 - 55. (previously presented) The system of claim 51, wherein said means for defining at least one of

known data type accepts user input that defines said first format of said data.

- 56. (previously presented) The system of claim 51, wherein said means for defining at least one of known data type accepts user input that defines said destination format of said data.
- 57. (previously presented) The system of claim 51, wherein said wherein said means for defining at least one of known data type accepts user input that defines said relationship between said destination address and said at least one of said known data type and said source address.
 - \$58.\$ (previously presented) $$\mbox{\footnotements}$$ The system of claim 51, wherein:

said addressing mechanism uses said
relationship in determining said destination address; and
said relationship relates said destination
address to both said known data type and said source address.

59. (previously presented) The system of claim 51, wherein:

said means for determining a destination
address uses said relationship in determining said destination
5 address; and

said relationship relates said destination address to said source address without relating said destination address to said known data type.

60. (previously presented) The system of claim 51, wherein:

said means for determining a destination
address uses said relationship in determining said destination
5 address; and

said relationship relates said destination address to said known data type without relating said destination address to said source address.

- 61. (previously presented) The system of claim 48, wherein said means for converting said data comprises means for selecting said destination format from a plurality of available destination formats based upon said known data type of said data.
- 62. (previously presented) The system of claim 48, wherein said means for converting said data comprises means for selecting said destination format from a plurality of available destination formats based upon said 5 destination address transmitted with said data in said first format.
- 63. (currently amended) A machine computer readable medium encoded with machine computer readable instructions for performing a method of communicating data of a known data type from a source process to a destination process, said method comprising:

receiving said data in a source format from said source process;

converting said data from said source format to a first format;

determining a destination address that is associated with said destination process based upon at least one of said known data type and a source address that is associated with said source process;

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transmitting said data in said first format 15 with said destination address;

receiving said data transmitted in said first format at said destination address;

converting said data in said first format to a destination format;

transmitting said data in said destination format to said destination process; and

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prior to said receiving of said data in said source format, defining at least one of said known data type, said source address, said source format, said first format, 25 said destination format, and a relationship between said destination address and said at least one of said known data

wherein said determining uses said relationship in determining said destination address, and said relationship 30 relates said destination address to both said known data type and said source address.

type and said source address,

64. (currently amended) The machine computer
readable medium of claim 63, said method further comprising:
when said data transmitted in said destination
format is received at said destination process, generating an
acknowledgment of receipt of said data; and

notifying a user of an error upon an occurrence of at least one of a specified number of other transmission attempts and an absence of said acknowledgment of receipt within a given time period.

- 65. (currently amended) The <u>machine computer</u> readable medium of claim 63, wherein each of said source format, said first format, and said destination format are different.
- 66. (currently amended) The machine computer readable medium of claim 63, wherein:

said source format and said destination format are identical; and

5 said source format and said destination format are different from said first format.

- 67. (currently amended) The machine computer readable medium of claim 63, wherein said defining comprises accepting user input that defines said known data type of said data.
- 68. (currently amended) The <u>machine computer</u> readable medium of claim 63, wherein said defining comprises accepting user input that defines said source address of said source process.
- 69. (currently amended) The $\frac{\text{computer}}{\text{machine}}$ readable medium of claim 63, wherein said defining comprises accepting user input that defines said source format of said data.
- 70. (currently amended) The $\frac{\text{computer}}{\text{machine}}$ readable medium claim 63, wherein said defining comprises accepting user input that defines said first format of said data.
- 71. (currently amended) The machine computer readable medium claim 63, wherein said defining comprises accepting user input that defines said destination format of said data.
- 72. (currently amended) The machine computer readable medium of claim 63, wherein said converting of said data from said first format to said destination format comprises selecting said destination format from a plurality of available destination formats based upon said known data type of said data.
 - 73. (currently amended) The machine computer readable medium of claim 63, wherein said converting of said data from said first format to said destination format comprises selecting said destination format from a plurality

- 5 of available destination formats based upon said destination address transmitted with said data in said first format.
- 74. (currently amended) A machine computer readable medium encoded with machine computer readable instructions for performing a method of communicating data of a known data type from a source process to a destination process, said method comprising:

receiving said data in a source format from said source process;

 $\qquad \qquad \text{converting said data from said source format to} \\ \text{a first format;} \\$

determining a destination address that is associated with said destination process based upon at least one of said known data type and a source address that is associated with said source process;

transmitting said data in said first format 15 with said destination address;

 $\mbox{receiving said data transmitted in said first} \\ \mbox{format at said destination address;} \\$

converting said data in said first format to a destination format;

20 transmitting said data in said destination format to said destination process; and

prior to said receiving of said data in said source format, defining at least one of said known data type, said source address, said source format, said first format, 25 said destination format, and a relationship between said

5 said destination format, and a relationship between said destination address and said at least one of said known data type and said source address,

wherein said determining uses said relationship in determining said destination address, and said relationship 30 relates said destination address to said source address without relating said destination address to said known data type. $75. \ \, (currently \ amended) \quad The \ \, \underline{machine \ \, computer}$ readable medium of claim 74, said method further comprising:

generating an acknowledgment of receipt of said data when said data transmitted in said destination format is received at said destination process; and

notifying a user of an error upon an occurrence of at least one of a specified number of other transmission attempts and an absence of said acknowledgment of receipt within a given time period.

- 76. (currently amended) The machine computer readable medium of claim 74, wherein each of said source format, said first format, and said destination format are different.
- 77. (currently amended) The $\frac{1}{2}$ The machine $\frac{1}{2}$ Computer readable medium of claim 74, wherein:

 $$\operatorname{said}$$ source format and said destination format are identical; and

- 5 said source format and said destination format are different from said first format.
 - 78. (currently amended) The <u>machine computer</u> readable medium of claim 74, wherein said defining comprises accepting user input that defines said known data type of said data.
 - 79. (currently amended) The <u>machine computer</u> readable medium of claim 74, wherein said defining comprises accepting user input that defines said source address of said source process.
 - 80. (currently amended) The $\frac{\text{computer}}{\text{machine}}$ readable medium of claim 74, wherein said defining comprises accepting user input that defines said source format of said data.

- 81. (currently amended) The machine computer readable medium of claim 74, wherein said defining comprises accepting user input that defines said first format of said data.
- 82. (currently amended) The machine computer readable medium of claim 74, wherein said defining comprises accepting user input that defines said destination format of said data.
- 83. (currently amended) The machine computer readable medium of claim 74, wherein said converting of said data from said first format to said destination format comprises selecting said destination format from a plurality of available destination formats based upon said known data type of said data.
- 84. (currently amended) The machine computer readable medium of claim 74, wherein said converting of said data from said first format to said destination format comprises selecting said destination format from a plurality of available destination formats based upon said destination address transmitted with said data in said first format.
- 85. (currently amended) A machine computer readable medium encoded with machine computer readable instructions for performing a method of communicating data of a known data type from a source process to a destination process, said method comprising:
 - receiving said data in a source format from said source process;
 - converting said data from said source format to a first format;
- 10 determining a destination address that is associated with said destination process based upon at least

one of said known data type and a source address that is associated with said source process;

transmitting said data in said first format 15 with said destination address;

receiving said data transmitted in said first format at said destination address;

converting said data in said first format to a destination format;

20 transmitting said data in said destination format to said destination process; and

prior to said receiving of said data in said source format, defining at least one of said known data type, said source address, said source format, said first format, 25 said destination format, and a relationship between said destination address and said at least one of said known data

type and said source address,

wherein said determining uses said relationship
in determining said destination address, and said relationship

30 relates said destination address to said known data type without relating said destination address to said source address.

86. (currently amended) The machine computer readable medium of claim 85, said method further comprising:

when said data transmitted in said destination format is received at said destination process, generating an

format is received at said destination process, generating a acknowledgment of receipt of said data; and

notifying a user of an error upon an occurrence of at least one of a specified number of other transmission attempts and an absence of said acknowledgment of receipt within a given time period.

87. (currently amended) The <u>machine computer</u> readable medium of claim 85, wherein each of said source format, said first format, and said destination format are different.

88. (currently amended) The machine computer readable medium of claim 85, wherein:

said source format and said destination format are identical; and

5 said source format and said destination format are different from said first format.

- 89. (currently amended) The <u>machine computer</u> readable medium of claim 85, wherein said defining comprises accepting user input that defines said known data type of said data.
- 90. (currently amended) The <u>machine computer</u> readable medium of claim 85, wherein said defining comprises accepting user input that defines said source address of said source process.
- 91. (currently amended) The $\frac{\text{computer}}{\text{machine}}$ readable medium of claim 85, wherein said defining comprises accepting user input that defines said source format of said data.
- 92. (currently amended) The machine computer readable medium of claim 85, wherein said defining comprises accepting user input that defines said first format of said data.
- 93. (currently amended) The machine computer readable medium of claim 85, wherein said defining comprises accepting user input that defines said destination format of said data.
- 94. (currently amended) The machine computer readable medium of claim 85, wherein said converting of said data from said first format to said destination format comprises selecting said destination format from a plurality

- 5 of available destination formats based upon said known data type of said data.
- 95. (currently amended) The machine computer readable medium of claim 85, wherein said converting of said data from said first format to said destination format comprises selecting said destination format from a plurality of available destination formats based upon said destination address transmitted with said data in said first format.
 - 96. (previously presented) A system for communicating data of a known data type from a source process to a destination process, the system comprising:

means for receiving said data in a source

5 format from said source process;

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 $\label{eq:means for converting said data from said source} % \[\frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2} \left(\frac{1}{2} \right) \left$

means for determining a destination address
that is associated with said destination process based upon at
10 least one of said known data type and a source address that is
associated with said source process;

 $\label{eq:means} \text{means for transmitting said data in said first} \\ \text{format with said destination address;}$

means for receiving said data transmitted in said first format at said destination address;

means for converting said data in said first

means for converting said data in said first format to a destination format;

means for transmitting said data in said destination format to said destination process; and

means for defining at least one of said known data type, said source address, said first format, said destination format, and a relationship between said destination address and said at least one of said known data type and said source address prior to said data in said source

25 format being received by said source receiver.

97. (previously presented) The system of claim 96, further comprising:

means for generating an acknowledgment of receipt of said data when said data transmitted by said destination transmitter is received at said destination process; and

means for notifying a user of an error upon an occurrence of at least one of a specified number of other transmission attempts and an absence of said acknowledgment of 10 receipt within a given time period.

- 98. (previously presented) The system of claim 96, wherein each of said source format, said first format, and said destination format are different.
- 99. (previously presented) The system of claim 96, wherein:

 $\mbox{ said source format and said destination format} \label{eq:said-source} \mbox{ are identical; and }$

- 5 said source format and said destination format are different from said first format.
 - 100. (previously presented) The system of claim 96, wherein said means for defining data accepts user input that defines said known data type of said data.
 - 101. (previously presented) The system of claim 96, wherein said means for defining data accepts user input that defines said source address of said source process.
 - 102. (previously presented) The system of claim 96, wherein said means for defining data accepts user input that defines said source format of said data.

- 103. (previously presented) The system of claim 96, wherein said means for defining data accepts user input that defines said first format of said data.
- 104. (previously presented) The system of claim 96, wherein said means for defining data accepts user input that defines said destination format of said data.
- 105. (previously presented) The system of claim 96, wherein said means for defining data accepts user input that defines said relationship between said destination address and said at least one of said known data type and said 5 source address.
 - 106. (previously presented) The system of claim 96, wherein:

said means for determining said destination address uses said relationship in determining said destination 5 address; and

said relationship relates said destination address to both said known data type and said source address.

107. (previously presented) The system of claim 96, wherein:

said means for determining said destination
address uses said relationship in determining said destination
5 address: and

said relationship relates said destination address to said source address without relating said destination address to said known data type.

108. (previously presented) The system of claim 96, wherein:

said means for determining said destination
address uses said relationship in determining said destination
address; and

said relationship relates said destination address to said known data type without relating said destination address to said source address.

- 109. (previously presented) The system of claim 96, wherein said means for converting comprises a selecting mechanism that selects said destination format from a plurality of available destination formats based upon said known data type of said data.
- 110. (previously presented) The system of claim 96, wherein said means for converting comprises a selecting mechanism that selects said destination format from a plurality of available destination formats based upon said 5 destination address transmitted with said data in said first format.
- 111. (currently amended) A machine computer readable medium encoded with machine computer readable instructions for performing a method of communicating data of a known data type from a source process to a destination process, said method comprising:
 - receiving the data in a source format from the source process; $% \left\{ \left\{ \left(\frac{1}{2}\right\} \right\} \right\} =\left\{ \left(\frac{1}{2}\right) \right\} =\left\{ \left(\frac{1}{2}$
 - converting the data from the source format to a first format;
- transmitting the data in the first format to a destination address that is associated with the destination process;
 - receiving the data transmitted in the first format at the destination address;
- 15 converting said data from the first format to a destination format;
 - $\mbox{transmitting the data in the destination format} \\ \mbox{to the destination process;}$

generating an acknowledgment of receipt of the
data when the data is received at the destination process;
notifying a user of an error upon an occurrence
of at least one of a specified number of other transmission
attempts and an absence of the acknowledgment of receipt
within a given time period;

25 identifying the data type of the transmitted data after receiving the data in the source format from the source process; and

determining the destination address based upon the identified data type of the transmitted data,

30 wherein the communicated data is of a known data type.

medium encoded with machine computer readable medium encoded with machine computer readable instructions for performing a method of communicating data of a known data type from a source process to a destination process, said method comprising:

receiving the data in a source format from the source process;

 $$\operatorname{converting}$$ the data from the source format to a first format:

10 transmitting the data in the first format to a destination address that is associated with the destination process;

 $\mbox{receiving the data transmitted in the first} \\ \mbox{format at the destination address;} \\$

15 converting said data from the first format to a destination format;

transmitting the data in the destination format to the destination process;

generating an acknowledgment of receipt of the 20 data when the data is received at the destination process;

notifying a user of an error upon an occurrence of at least one of a specified number of other transmission attempts and an absence of the acknowledgment of receipt within a given time period;

identifying the data type of the transmitted data after receiving the data in the source format from the source process; and

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determining the destination address based upon the identified data type of the transmitted data and a source 30 address associated with the source process,

 $\mbox{ wherein the communicated data is of a known} \label{eq:communicated} \mbox{ data is of a known}$

113. (currently amended) A machine computer readable medium encoded with machine computer readable instructions for performing a method of communicating data of a known data type from a source process to a destination process, said method 5 comprising:

accepting user input that defines a relationship between a destination address that is associated with the destination process and at least one of the known data type and a source address that is associated with the source process;

receiving the data in a source format from the source process;

converting the data from the source format to a first format;

determining the destination address based upon the defined relationship after receiving the data in the source format from the source process;

transmitting the data in the first format to the destination address;

20 receiving the data transmitted in the first format at the destination address:

converting the data in the first format to a destination format; and

transmitting the data in the destination format 25 to the destination process.

- 114. (currently amended) The machine computer readable medium of claim 113, said method further comprising:

 defining the known data type, the source address, the source format, the first format, and the

 destination format, prior to receiving the data in the source format.
- 115. (currently amended) The machine computer readable medium of claim 114, wherein the step of defining comprises accepting user input that defines the known data type, the source address, the source format, the first format, and the destination format.
- 116. (currently amended) The machine computer readable medium of claim 113, wherein the step of converting the data from the first format to the destination format comprises selecting the destination format from a plurality of available destination formats based solely upon the known data type.
 - 117. (currently amended) The machine computer readable medium of claim 113, wherein:

 $\mbox{the data is transmitted in the first format} \\ \mbox{with the destination address; and} \\$

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- the step of converting the data from the first format to the destination format includes selecting the destination format plurality of available destination formats based upon the destination address transmitted with the data in the first format.
- 118. (currently amended) A $\frac{1}{2}$ machine $\frac{1}{2}$ readable medium encoded with $\frac{1}{2}$ machine computer readable instructions for

performing a method of communicating data from a source process to a destination, said method comprising:

5 receiving the data in a source format from the source process;

converting the data from the source format to a first format;

transmitting the data in the first format to a 10 destination address that is associated with the destination process;

 $\mbox{receiving the data transmitted in the first} \\ \mbox{format at the destination address;} \\$

 $\qquad \qquad \text{converting said data from the first format to a} \\ 15 \quad \text{destination format;} \\$

 $\mbox{transmitting the data in the destination format} \\ \mbox{to the destination process;}$

generating an acknowledgment of receipt of the data when the data is received at the destination process; and notifying a user of an error upon an occurrence of at least one of a specified number of other transmission attempts and an absence of the acknowledgment of receipt within a given time period.

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- 119. (currently amended) The $\frac{\text{computer}}{\text{machine}}$ readable medium of claim 118, wherein the communication data is of a known data type.
- 120. (currently amended) The machine computer readable medium of claim 118, said method further comprising:

 determining the destination address based upon a source address associated with the source process after receiving the data in the source format from the source process.
 - 121. (previously presented) The method of claim 34, further comprising:

transmitting the data in the first format to a destination address that is associated with the destination 5 process; and

receiving the data transmitted in the first format at the destination address.

- 122. (currently amended) The machine computer readable medium of claim 37, said method further comprising: transmitting said data in said first format with said destination address;
- 5 receiving said data transmitted in said first format at said destination address.